# Recycling Program Report Supplemental Information

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# Recycling Program Report Supplemental Information

# Waste Disposed at Solid Waste Landfills

Table 12. Tons of Waste Disposed at Solid Waste Landfills in Arizona, as Reported to ADEQ (April 2000 to March 2001)

Name	Type <sup>1</sup>	County	Operation Status	Tipping fee <sup>2</sup>	Total tons landfilled <sup>3</sup>
Abitibi Consolidated – Snowflake	PSWLF	Navajo	Active	NA	106,505.28
Allied Waste – Apache Junction	MSWLF	Pinal	Active	\$30.00/ton	82,742.44
Allied Waste – Lake Havasu City	MSWLF	Mohave	Active	\$20.50/yd <sup>3</sup>	62,588.80
Allied Waste – Queen Creek	MSWLF	Maricopa	Active	\$30.00/ton	173,167.28
Allied Waste – Southwest Regional	MSWLF	Maricopa	Active	\$20.00/ton	345,976.24
Apache County – Blue Hills Regional	MSWLF	Apache	Active	\$50.00/ton	11,868.56
AEPCO – Apache Power Generating Station	PSWLF	Apache	Active	NA	262.14
Arizona Power Service - Palo Verde	PSWLF	Maricopa	Active	NA	33,449.68
Arizona State Prison – Fort Grant	MSWLF	Graham	Inactive	NA	0.00
Arizona Strip	MSWLF	Mohave	Active	NA	4,403.24
ASARCO Ray Complex – Hayden Concentrator	PSWLF	Pima	Active	NA	7,058.41

Table 12. Tons of Waste Disposed at Solid Waste Landfills in Arizona, as Reported to ADEQ (April 2000 to March 2001)

Name	Type <sup>1</sup>	County	Operation Status	Tipping fee <sup>2</sup>	Total tons landfilled <sup>3</sup>
ASARCO Ray Complex – Hayden Smelter	PSWLF	Pima	Active	NA	5,027.47
ASARCO Ray Complex – Mission	PSWLF	Pima	Active	NA	854.46
ASARCO Ray Complex – Ray Mine	PSWLF	Pima	Active	NA	10,377.97
ASARCO Ray Complex – Silver Bell	PSWLF	Pima	Active	NA	120.56
BHP Copper – San Manuel Plantsite	PSWLF	Gila	Active	NA	400.00
BHP Copper – San Manuel Plantsite Wood Dump	PSWLF	Gila	Active	NA	192.00
BHP Copper – San Manuel Minesite Garbage	PSWLF	Gila	Active	NA	192.00
BHP Copper – San Manuel Mainsite	PSWLF	Gila	Active	NA	192.00
BHP Copper – San Manuel Mainsite Wood Dump	PSWLF	Gila	Active	NA	192.00
BHP Copper – Superior	PSWLF	Pinal	Active	NA	4,784.08
Bradley Investment – 40th Street	NMSWLF	Maricopa	Active	NA	0.00
Calmat – Litchfield/ Avondale	NMSWLF	Maricopa	Active	Unknown	66,556.44
Casa Grande, City of – Casa Grande	MSWLF	Pinal	Active	\$11.00/ton	60,940.00
Chandler, City of – McQueen	MSWLF	Maricopa	Active	\$28.40/ton	98,156.72

Table 12. Tons of Waste Disposed at Solid Waste Landfills in Arizona, as Reported to ADEQ (April 2000 to March 2001)

Name	Type <sup>1</sup>	County	Operation Status	Tipping fee <sup>2</sup>	Total tons landfilled <sup>3</sup>
Cochise County – Elfrida/Eastern Regional	MSWLF	Cochise	Active	\$39.00/ton	63,967.00
Cocopah Nation – San Luis Billing	MSWLF	Yuma	Closed	NA	1,626.20
Cocopah Nation – Somerton Billing	MSWLF	Yuma	Closed	NA	537.64
Cocopah Nation – Yuma Billing	MSWLF	Yuma	Closed	NA	3,022.00
Cypres – Bagdad	NMSWLF	Yavapai	Active	NA	578.08
Cyprus – Sierrita	PSWLF	Pima	Active	NA	1,593.28
Eloy, City of – Eloy	MSWLF	Pinal	Active	\$20.00/ton	16,267.00
Flagstaff, City of – Cinder Lake	MSWLF	Coconino	Active	\$31.10/ton	111,160.96
Gambi Disposal – Cerbat	MSWLF	Mohave	Active	\$31.75/ton	55,798.56
Gila County – Buckhead Mesa/Payson	MSWLF	Gila	Active	\$31.00/ton	26,949.03
Gila County – Russell Gulch/Globe	MSWLF	Gila	Active	\$31.00/ton	16,634.92
Glendale, City of – Glendale	MSWLF	Maricopa	Active	\$26.25/ton	357,174.96
Glenn Weinberger – Rainbow Valley	NMSWLF	Maricopa	Active	Unknown	122,359.79
Graham County – Graham County Regional	MSWLF	Graham	Active	Unknown	12,121.00
Grand Canyon National Park – South Rim	MSWLF	Coconino	Active	Unknown	2,272.20

Table 12. Tons of Waste Disposed at Solid Waste Landfills in Arizona, as Reported to ADEQ (April 2000 to March 2001)

Name	Type <sup>1</sup>	County	Operation Status	Tipping fee <sup>2</sup>	Total tons landfilled <sup>3</sup>
Greenlee County – Blue	MSWLF	Greenlee	Active	Unknown	224.00
Greenlee County – Loma Linda	MSWLF	Greenlee	Active	Unknown	8,744.96
Huachuca City, City of – Huachuca City	MSWLF	Cochise	Active	\$39.00/ton	29,462.52
La Paz County Regional – La Paz County	MSWLF	La Paz	Active	\$20.00/ton	50,900.04
Mohave County – Mohave Valley	MSWLF	Mohave	Active	\$29.00/ton	66,619.28
Patagonia, Town of – Patagonia	MSWLF	Santa Cruz	Active	\$10.00/yd³	992.60
Phelps Dodge – Morenci	NMSWLF	Greenlee	Active	NA	514.96
Phoenix, City of – Skunk Creek	MSWLF	Maricopa	Active	\$24.25/ton	752,720.24
Pima County – Ajo	MSWLF	Pima	Active	\$23.50/ton	3,321.92
Pima County – Ina Road	NMSWLF	Pima	Active	Unknown	24,657.56
Pima County – Sahuarita	MSWLF	Pima	Active	\$23.50/ton	42,341.64
Pima County – Tangerine Road	MSWLF	Pima	Active	\$23.50/ton	101,736.28
Prescott, City of – Sundog Ranch Road	MSWLF	Yavapai	Inactive	NA	0.00
Resource Recovery Trust – Speedway	NMSWLF	Pima	Active	Unknown	38,345.00
Salt River Indian Tribe – Gilbert Billing	MSWLF	Maricopa	Active	\$35.00/ton	68,033.72

Table 12. Tons of Waste Disposed at Solid Waste Landfills in Arizona, as Reported to ADEQ (April 2000 to March 2001)

Name	Type <sup>1</sup>	County	Operation Status	Tipping fee <sup>2</sup>	Total tons landfilled <sup>3</sup>
Salt River Indian Tribe – Mesa Billing	MSWLF	Maricopa	Active	\$35.00/ton	222,636.16
Salt River Indian Tribe – Private Hauler Billings	MSWLF	Maricopa	Active	\$35.00/ton	71,787.51
Salt River Indian Tribe - Scottsdale Billing	MSWLF	Maricopa	Active	\$35.00/ton	132,277.40
SRP – Coronado Generating Station	NMSWLF	Apache	Active	Unknown	472.64
Santa Cruz County – Rio Rico	MSWLF	Santa Cruz	Active	\$32.00/ton	43,871.15
Santa Cruz County – Sonoita/Elgin	MSWLF	Santa Cruz	Active	\$23.00/ton	1,144.00
Tucson, City of – Los Reales	MSWLF	Pima	Active	\$23.00/ton	529,463.04
Waste Management – Ironwood (Adamsville)	MSWLF	Pinal	Active	Unknown	324,864.00
Waste Management – Butterfield Station	MSWLF	Maricopa	Active	\$21.75/ton	1,143,005.44
Waste Management – Copper Mountain	MSWLF	Yuma	Active	\$20.00/ton	301,373.20
Waste Management – Dudleyville	MSWLF	Pinal	Active	\$10.00/yd <sup>3</sup>	8,373.00
Waste Management – Grey Wolf	MSWLF	Yavapai	Active	\$31.99/ton	197,413.64
Waste Management – Lone Cactus	MNSWLF	Maricopa	Active	Unknown	621,737.08
Waste Management – Northwest Regional	MSWLF	Maricopa	Active	\$21.75/ton	585,505.48

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Name	Type <sup>1</sup>	County	Operation Status	Tipping fee <sup>2</sup>	Total tons landfilled <sup>3</sup>
Waste Management – Painted Desert (Pen rob)	MSWLF	Navajo	Active	\$6.15/yd <sup>3</sup>	121,591.80
Waste Management – Sierra Estrella	MSWLF	Pinal	Active	Unknown	0.00
Yuma Proving Grounds	MSWLF	Yuma	Active	Unknown	14,016.00
Total					7,376,216.65

## 1. Types

- , MSWLF represents municipal solid waste landfills.
- , NMSWLFrepresents non-municipal solid waste landfills that accepts items like construction debris and greenwaste.
- , PSWLF represents private solid waste landfills. A private landfill is one for which the public does not have access. A private landfill is one that is on a property and only handles waste that is generated on that property.
- 2. Tipping fee figures are from Solid Waste Digest: Western Edition; Chartwell Information Publishers. Volume 11. number 6. June 2001.
- 3. Tonnage was determined using payments received from landfill owners of \$0.25/ton. Missing payments were estimated by comparing payments from other quarters of FY 1999 to equivalent quarters from past years.

# **Project Funded Resources**

The following is a list of resources generated from projects funded through the recycling program. The list is provided in the following format: organization, document name, publication date, title of project, type of project and document type. To obtain copies of the resources listed below, please contact Information Coordinator Jackie Hosier at (602) 207-4134 or, toll free in Arizona, (800) 234-5677, Ext. 4134.

#### **Audio**

Cottonwood-Verde Valley Recycles, "Compost and Recycling Program," WRA Grant, 1998. Cassette containing three radio public service announcements (PSAs) that

provide information on recycling in the Cottonwood/Verde Valley area. The PSAs are titled: "Fairy Mulch Mother," "Recycling Rap," and "Sounds of Recycling."

City of Flagstaff, "Ready for Recycling," WRITE Grant, 1999. Cassette containing two radio PSAs that provide information on the city of Flagstaff's recycling program.

Starr Communications, "Radio Public Service Advertisements Campaign," WRITE Grant, 1999. Compact discs, volumes I-III, containing celebrity radio PSAs which promote recycling with reference to 1-800-CLEANUP.

### Guidebooks, How-to Manuals and Technical Reports

Advanced Environmental Systems, Inc. and Arizona Sheet Fabrication Inc. , "Post Consumer Mixed Grade Thermoplastic Wood Substitute," RRR Grant, 1992. Final report.

Architectural Landscaping, Inc., "Desert Composting Pilot Project," RRR Grant, 1991. The project includes a description of the designing, building and operating a desert composting facility for municipal yard waste. Final report.

Arizona Clean and Beautiful/Gainer and Associates' Workshops, "Recycling Entrepreneurship in Arizona," RRR Grant, 1992. Final report.

Arizona Filter Recyclers, WRA Grant, 1994. The project established a centralized collection site for used oil and filters. Reference document.

Arizona Hotel/Motel Association, "Waste Reduction Education Campaign for the Hospitality Industry," WRITE Grant, 1997. Guidebook and workshop presentation titled "Inn-Keeping with the Environment: A Waste Reduction Guidebook for the Arizona Lodging Industry."

At well Salvage and Demolition Inc. , "Recycling of Construction Materials," RRR Grant, 1991. Final report.

Cochise County and University of Arizona, "Cochise County Pilot Composting of Yard Waste," RRR Grant, 1991. Guidebook is titled "Pilot Composting of Yard Wastes at Seven Sites in Cochise County."

Continental Circuits Corporation, "Circuit Board Recycling Project," RRR Grant, 1991. Final report.

Environmental Concerns Organization, Inc., "Recycling Association of Maricopa," WRA Grant, 1997. Guidebook to starting a recycling and education program. Final

report.

Enviro Sand, Inc., "Buy EnviroMill Machine," WRA Grant, 1998. Final report.

City of Flagstaff, "Commercial Waste Audit and Pilot Recycling Program," RRR Grant, 1991. Final report.

City of Flagstaff, "City of Flagstaff Environmental Education," RRR Grant, 1992. Final report.

Gila Ridge Pallet Company, "Pallet Waste Reduction Project," WRA Grant, 1998. Final report.

Growing Connections, Inc., "Teaching Reduce, Reuse and Charity to School Children," RRR Grant, 1991. Final report.

Maricopa Association of Governments, "Regional Recycling Information Exchange," WRA Grant, 1998. Recycling information. Final report.

Metallurgical and Biological Extraction Systems, Inc. (MBX), "Removal and Reuse of Aluminum Dross," RRR Grant, 1991. Final report.

Northern Arizona University, "Northern Arizona University Campus Wide Aluminum Collection Buy-Back Center and Catalog Paper Recovery," RRR Grant, 1991. Final report.

Norton Environmental, Inc., "Flagstaff Glass Pulverizing System," WRA Grant, 1998. Final report.

Organic Products Committee of the Arizona Recycling Coalition, WRITE Grant, 1998. Compost resource guidebook was produced.

City of Phoenix, "Book Bag Reuse Project," RRR Grant, 1991. Final report.

Phoenix Center for Community Development, RRR Grant, 1991. Final report.

Phoenix Metro Desert Compost (The Groundskeeper) WRA Grant, 1994. Final report. Summaries are available on the processing and marketing of the material produced by Phoenix Metro Desert Compost.

Pima County, "Pima County: Arizona Compost Project," RRR Grant, 1993. Final report.

Pinal County, "Pinal County Triple R Co-Op," RRR Grant, 1991. Final report.

Pinal County, "Pinal County Triple R Co-Op: The Composting Workshop," RRR Grant, 1993. Final report.

R. W. Beck and Associates, "R. W. Beck and Associates Source Reduction/Recycling Workshop," RRR Grant, 1991. A guidebook titled "Source Reduction and Recycling Programs: An Integrated Approach" was produced.

R & W Recycling (a. k. a. New World Recycling), "The Old Corrugated Cardboard Recovery Project," WRA Grant, 1994. Final report.

Recycling Industries, Inc. , "Freon Removal From Discarded Appliances," RRR Grant, 1992. Final report.

River Cities Waste Service, Lake Havasu City, "Boy Scouts Newspaper Drop-off," WRA Grant, 1998. Final report.

SASCO Products Inc., "Development of a Reuse and Recycling Protocol for Discarded Appliances," RRR Grant, 1991. Final report.

Santa Cruz County and the city of Nogales, "Santa Cruz and Nogales MRF Study and Recycling Project," RRR Grant, 1991. Final report.

Southwest Public Recycling Association, "Southwest Public Recycling Association Market Development Program for the Southwest Region," RRR Grant, 1991. Final report.

Southwest Public Recycling Association (SPRA), "Southwest Public Recycling Association, Attachment B, Arizona Cooperative Marketing Photo Journal," RRR Grant, 1993. The supplemental report is titled "Attachment B, Arizona Cooperative Marketing Photo Journal, SPRA Second Quarter Report." (slides)

Southwest Public Recycling Association, "Recycling Technical Assistance to Rural Communities and Development of Rural Case Studies," WRITE Grant, 1998. Final report.

Southwest Public Recycling Association, "Proposal to Develop Commercial Glass Recycling Infrastructure in the Phoenix Area," WRA Grant, 1999. This project produced a guide titled "Bar and Restaurant Recycling Guide."

City of Tucson, "City of Tucson Comprehensive Waste Reduction Model," RRR

Grant, 1991. The guidebook is titled "A Model for a Comprehensive Waste Reduction Procurement Program - Technical Guide for Purchasing Officials."

Tucson Iron and Metal, "Paper and Plastic Recycling Program," WRA Grant, 1998. Final report.

Tucson Organic Gardeners, "Tucson Organic Gardener's Home Composting Program," RRR Grant, 1991. Final report.

University of Arizona, "University of Arizona Commercial Solid Waste Characterization of the Tucson Metropolitan Area," RRR Grant, 1991. Final report.

University of Arizona, "A Characterization of the Solid Wastes of City of Tucson Governmental Agencies," RRR Grant, 1993. Final report.

University of Arizona, "University of Arizona Waste Reduction Alternatives Program (WRAP)," RRR Grant, 1992. This project produced several manuals titled "Waste Reduction Alternatives Programs (WRAP) Resource Manual" and "WRAP Action Plan for the Tucson Unified School District."

VMB Enterprises, "Grant Training Seminars," WRITE Grant, 1997. Guidance document.

White Mountain Recycling Project; RRR Grant, 1991. Demonstration project of centralized recycling collection site and facility. Reference document.

City of Williams, "Commercial and Residential Trash Containers/Curbside Recycling," WRA Grant, 1998. Final report.

# Promotional Campaigns, Including Brochures, Pamphlets and Recycling Curricula

Agua Fria-New River Natural Resource Conservation District, "The Earthworm Tunnel," WRITE Grant, 1997. The WRITE Grant included a walk-through tunnel that demonstrated composting of household organic wastes through worm composting. A brochure on worm composting and accompanying educational fliers resulted.

Cochise County, "Community Education Program on Waste Reduction," WRITE Grant, 1999. Recycling education campaign which included newspaper and radio ads, and a school curriculum packet including a coloring/activity book. Brochures for the seven participating communities provide specific information on recycling drop-off sites. Appeals to all ages.

Cottonwood-Verde Valley Recycles, "Educational and Informational Outreach on Recycling and Waste Reduction to Residents, Schools and Businesses of the Verde Valley," WRITE Grant, 1997. Community education program that included a business seminar, theater production and curriculum for grades K-8.

Town of Eagar, "Community Education Program," WRITE Grant, 1999. The WRITE Grant included a public awareness campaign that featured newspaper advertisements, radio PSAs, posters, bulletins and a local recycling directory.

EM Technologies, Inc., "Educating Arizona: Recycling School Lunchroom Waste through the EM Bokashi Network," WRITE Grant, 1998. A curriculum was developed and several demonstration workshops were produced to educate students about the use of effective microorganisms for reuse of food waste as a soil amendment, and to promote the recycling of school cafeteria waste. A teacher's manual and video of EM Bokashi composting techniques resulted.

Environmental Concerns Organization, Inc. , "Maricopa Education Project," WRITE Grant, 1999. Curriculum packet for K-3. This project developed educational materials that focus on illegal dumping and local recycling options. The materials were developed in both English and Spanish for an adult audience.

City of Flagstaff, "Ready for Recycling," WRITE Grant, 1999. Brochures, posters and magnets, with mascot "Curby," that promote the city of Flagstaff's recycling education campaign. Samples available for review with access to reproduction.

Gila County Solid Waste Department, "Gila County Recycle Grant," WRITE Grant, 1997. A fact sheet was designed with information regarding recycling activities in the county. Designed for grades K-12.

Town of Gilbert, "Recycling Education Pilot Program," WRITE Grant, 1997. Coloring/activity books for pre-school and elementary level students.

City of Phoenix, "Household Hazardous Waste Program," WRITE Grant, 1999. Household hazardous waste education program was delivered through mascot presentations and classroom presentations for elementary and middle schools. The Recyclesaurus Activity Book teaches about litter prevention, composting, recycling and hazardous waste topics.

City of Scottsdale, "The Sustainable Environment Brochure Series," WRITE Grant, 1995. A series of four brochure templates that provides waste reduction, recycling, household hazardous waste and environmental shopping information. Applicable to any community. (Spanish and English versions available.)

Southwest Public Recycling Association, "Household Hazardous Waste (HHW) Education," WRITE Grant, 1999. A brochure titled "Leaving Your Hazardous Waste...," which provides general information on the proper disposal of HHW, is available. The brochure negative is available for re-printing.

Stardust Building Supplies, "Public Awareness and Promotion Program," WRITE Grant, 1999. A promotional campaign for Stardust Building Supplies, an organization that collects, refurbishes and sells reusable building supplies; thus removing those materials from the waste stream. A newsletter, press release, sticker and final report resulted from the campaign.

Tuba City Family Wellness Center, "The Protective Circle Project," WRITE Grant, 1999. A recycling education curriculum for K-12 that promotes the awareness of various environmental issues of Native American lands titled "Environmental Protection of Native American Lands: A Cultural Approach to Integrated Environmental Studies and Protective Circle" was developed. Also, a brochure containing recycling education for Coconino County, including Western Navajo Nation was produced. Copies of the brochure and curriculum are available for review.

Tucson Clean and Beautiful, "Tucson/Pima County Waste Reduction Education Display and Brochures," WRITE Grant, 1997. Display board and associated brochures that describe waste reduction techniques for the Pima County area. Display board is located at Tucson Clean and Beautiful.

City of Tucson, "Ravin' About Recycling Campaign," WRITE Grant, 1997. The documents from the city of Tucson recycling education campaign include: Master Recycler Program Training Manual, slides of Master Recycler training, composting and recycling informational brochures and waste reduction and recycling resource listing for small businesses.

### Software Programs

Environmental Education Exchange, "Mission 3R – A Challenge for Change," WRITE Grant, 1995. Interactive software program for elementary and middle-school students, teachers and youth workers. Software program, teacher's guide and promotional brochure are available. Appeals to children ages 6-14, teachers, educators and adults. (PC version available.)

#### Video Tapes

Alliance Marketing Southwest, "Resell, Reuse and Recycle," WRA Grant, 1997. This tape contains a description of the program to resell, donate and recycle used textbooks. Appeals to teachers, educators and school officials.

Arizona Clean and Beautiful, "Influence Behavior Public Service Announcements,"

WRITE Grant, 1998. This project produced three television PSAs which include: Cowboy Camp out - cowboys sitting around campfire discussing advantages of recycling to one cowboy who does not recycle; Little Boy Recycling with Neighbors - little boy recycling newspapers with neighbors and asks his father why everyone doesn't recycle; Tom Chambers Basketball Scene - friends watching basketball game on TV, Tom Chambers promotes the advantages of recycling to one friend who does not recycle. Appeals to all ages.

City of Flagstaff Clean and Green, "Waste Reduction for Small Business," RRR Grant, 1992. Waste reduction and recycling tips for small businesses. Appeals to small business owners.

City of Flagstaff, "Ready for Recycling," WRITE Grant, June 1999. Program information on how to recycle in Flagstaff; three television advertisements.

Mesa High School, "Project Earthship 1996-1997," WRITE Grant, 1995. Information about Mesa High School Project Earthship. Demonstrates the start-up and construction processes. Appeals to high school students and educators.

New Wave Productions, LLC, "Hip-Hop Public Service Announcements," WRITE Grant, 1999. Two PSAs were developed focusing on buying recycled products and the proper disposal of used oil. Target audience is the 16 to 24 year old age group with a "hip-hop" lifestyle.

Phoenix Clean and Beautiful, "The Valley Shares," WRA Grant, 1997. Information on how individuals, businesses and organizations can recycle by donating office equipment, supplies, etc. to the Valley Shares Program. It also explains how non-profit/charitable organizations can benefit by using the program to obtain office equipment, etc. Appeals to businesses, educators, charitable organizations and adults.

Tuba City Family Wellness Center, "The Protective Circle Project," WRITE Grant, 1999. A recycling education video, developed for Coconino County and the Western Navajo Nation, which focuses on the proper waste disposal and what materials can be recycled in Coconino County. Video geared for local community.

City of Tucson, "ReThink It Pilot Project," WRITE Grant, 1994. This video contains a program description and operation information on the ReThink It recycling project. Appeals to adults.

City of Tucson, "Ravin' About Recycling," WRITE Grant, 1998. Four recycling education campaign PSAs, one in Spanish, that promote proper neighborhood recycling in the city of Tucson. Appeals to all ages.

Tucson Organic Gardeners, "Home Composting in the Desert," RRR Grant, 1991. Informational guide to backyard composting of yard trimmings and kitchen wastes. Appeals to all ages and educators. Available in Spanish.

#### Other Resources

Arizona State Recycling Emblem, 1994 trademark. The emblem can be used by any Arizona organization for use in promoting recycling and waste reduction efforts.

Arizona State University, "The Arizona Recycling Review Newsletter," RRR Grant, 1991. Quarterly newsletters describe solid waste reduction and recycling awareness projects in Arizona. The contract agreement was from 1992 through 1999. Selected volumes are available.

Arizona Department of Environmental Quality's Arizona Recycling Program, "Arizona Recycles." Quarterly newsletters include information on solid waste reduction and recycling projects, as well as Arizona Recycling Program activities.

Other recycling educational tools that focus on: proper disposal of household hazardous waste, buying recycled products, composting and waste reduction techniques are available at no cost to the public. Quantities are limited.

# **Funded Projects**

Table 13. Funded Projects					
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Advanced Environmental Systems	Plastics Research and Development	RRR	1991	\$30,000.00	Maricopa
Architectural Landscaping, Inc.	Desert Composting Facility	RRR	1991	\$62,700.00	Pima
ASU Center for Environmental Design	Recycling Newsletter	RRR	1991	\$28,000.00	Maricopa
Atwell Salvage and Demolition, Inc.	C and D Recycling	RRR	1991	\$23,000.00	Maricopa
Cochise County	County-wide R and D Composting Strategies	RRR	1991	\$65,349.00	Cochise
Continental Circuits Corporation	Circuit Board Recycling	RRR	1991	\$49,000.00	Maricopa
City of Cottonwood	Yard Waste Recycling	RRR	1991	\$20,000.00	Yavapai
City of Flagstaff	Hospitality Industry Waste Audit	RRR	1991	\$6,941.00	Coconino
Growing Connections	Reuse Education in Schools	RRR	1991	\$17,254.00	Coconino
MBX	Source Reduction	RRR	1991	\$36,000.00	Pima
MBX	Aluminum Dross	RRR	1991	\$36,500.00	Pima
City of Nogales and Santa Cruz County	Mrf Study and Recycling Project	RRR	1991	\$65,000.00	Santa Cruz
Northland Pioneer College	Office Paper Recycling Expansion	RRR	1991	\$25,485.00	Navajo
Northern Arizona University	University Recycling Program	RRR	1991	\$7,431.00	Coconino

Table 13. Funded Pro	jects				
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Phoenix Center for Community Development	Waste Reduction for Small Business	RRR	1991	\$59,100.00	Maricopa
City of Phoenix	Book Reuse	RRR	1991	\$25,000.00	Maricopa
Pinal County	Solid Waste Management Strategy	RRR	1991	\$56,547.00	Pinal
R. W. Beck and Associates	Source Reduction and Recycling Workshops	RRR	1991	\$23,000.00	Maricopa
CURE (Sam Hughes Neighborhood Project)	Drop-offs and Composting	RRR	1991	\$3,390.00	Pima
SASCO	White Goods Recycling	RRR	1991	\$23,345.00	Pima
Southwest Public Recycling Association	Cooperative Marketing of Recyclables	RRR	1991	\$25,000.00	Pima
City of Tucson	Comprehensive Waste Education Model	RRR	1991	\$70,368.00	Pima
Tucson Metropolitan Ministries	Construction Material Reuse	RRR	1991	\$47,000.00	Pima
Tucson Organic Gardeners	Backyard Composting Demonstration	RRR	1991	\$15,250.00	Pima
University of Arizona	Commercial Solid Waste Characterization	RRR	1991	\$35,742.00	Pima
White Mountain Recycling	Recycling Center	RRR	1991	\$11,000.00	Apache
Advance Environmental Systems	Thermoplastic Wood Substitute	RRR	1992	\$30,000.00	Maricopa

Table 13. Funded Projects					
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Arizona Clean and Beautiful	Recycling Workshops	RRR	1992	\$27,740.00	Maricopa
Arizona Recycling Coalition	Workshops and Publicity	RRR	1992	\$15,427.00	Maricopa
Arizona Waste Exchange	Waste Exchange	RRR	1992	\$35,000.00	Pima
Blue Hills Environmental Associates	Mobile Used Oil Collection	RRR	1992	\$3,012.00	Apache
Coalition of United Recycling Efforts	Source Reduction for School Children	RRR	1992	\$8,870.00	Pima
Cochise County	Household Hazardous Waste	RRR	1992	\$19,800.00	Cochise
City of Flagstaff	Resource Center for Environmental Education	RRR	1992	\$9,786.00	Coconino
City of Flagstaff	Flagstaff Clean and Green	RRR	1992	\$15,950.00	Coconino
Fort Howard Corporation	Paper Mill Feasibility Project	RRR	1992	\$70,000.00	Yuma
Friedman Recycling Company	Glass Recycling Project	RRR	1992	\$60,000.00	Maricopa
City of Glendale	Multi-family Drop- off Recycling	RRR	1992	\$9,540.00	Maricopa
Recycling Industries	Mobile Appliance Recycling	RRR	1992	\$38,000.00	Maricopa
Santa Cruz County and the Town of Patagonia	Mobile Recycling Project	RRR	1992	\$17,355.00	Santa Cruz
Southwest Public Recycling Association	Cooperative Marketing Project	RRR	1992	\$74,540.00	Pima
Tucson Metropolitan Ministry	Construction Material Reuse	RRR	1992	\$40,000.00	Pima

Table 13. Funded Projects						
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County	
University of Arizona	School Waste Stream Characterization	RRR	1992	\$40,000.00	Pima	
Waste Not Warehouse	Durable Goods Reuse	RRR	1992	\$20,000.00	Pima	
Why Waste America	Plastics Processing Facility	RRR	1992	\$55,000.00	Maricopa	
Yuma WORC Center, Inc.	Recycling Facility	RRR	1992	\$50,000.00	Yuma	
Apache Junction Clean and Beautiful	Waste Control Newsletter	WRE	1993	\$548.12	Pinal	
Blue Hills Environmental Associates	Changing Attitudes about Solid Waste	WRE	1993	\$4,599. 73	Apache	
City of Chandler	Backyard Composting Program	WRE	1993	\$1,299.00	Maricopa	
City of Flagstaff	Science Kit Curriculum Revision	WRE	1993	\$1,388.61	Coconino	
City of Mesa	Recycling Publicity Materials	WRE	1993	\$8,723.82	Maricopa	
City of Peoria	1992 Waste Reduction Education Grant	WRE	1993	\$1,532.80	Maricopa	
City of Phoenix	Facility Education Program	WRE	1993	\$29,779.08	Maricopa	
City of Sierra Vista	Household Hazardous Waste Program	WRE	1993	\$748.78	Cochise	
City of Tempe	Composting in the Desert	WRE	1993	\$4,295.92	Maricopa	
Cochise County	Master Recyclers	WRE	1993	\$5,207.38	Cochise	

Table 13. Funded Pro	ojects 	T	<del>                                     </del>		T
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Growing Connections	Teaching Concepts of Waste Reduction and Charity	WRE	1993	\$2,500.00	Pima
La Paz County	Master Recyclers	WRE	1993	\$3,419.25	La Paz
Navajo County	Cooperative Paper Project	WRE	1993	\$5,103.67	Navajo
Pinal County	Composting Workshop	WRE	1993	\$4,686.76	Pinal
SW Environmental Education Exchange	Waste Reduction Education Program	WRE	1993	\$9,797.97	Pima
Tucson Organic Growers	Home Composting Education Program	WRE	1993	\$1,800.00	Pima
Tucson Children's Museum	Environmental Education Program	WRE	1993	\$2,900.00	Pima
Arizona Filter Recyclers	Used Oil Filter Recycling	WRA	1994	\$55,000.00	Maricopa
Arizona Organic Products	Wood Waste Recovery Facility	WRA	1994	\$65,000.00	Pima
Catalina Sunshine, Inc.	Recycling Truck	WRA	1994	\$35,000.00	Pima
Environmental Earthscapes, Inc.	Commercial Composting Facility in Phoenix	WRA	1994	\$50,000.00	Maricopa
Krushco Masonry Recycling Pilot Project	Concrete Waste Recycling Project	WRA	1994	\$60,000.00	Maricopa
R and W Recycling and New World Recycling	Commercial Cardboard Recycling	WRA	1994	\$17,282.00	Coconino

Table 13. Funded Projects							
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County		
Sedona Recycles, Inc.	Building Permanent Recycling Facility	WRA	1994	\$60,000.00	Yavapai		
Western Organics, Inc.	Biosolids Composting Expansion	WRA	1994	\$55,000.00	Maricopa		
Yuma WORC Center, Inc.	Recycling Operation Expansion	WRA	1994	\$50,000.00	Yuma		
Arizona Broadcasters Association	Mass Media Public Service Announcements	WRITE	1995	\$55,000.00	Maricopa		
AzRC/Organic Products Committee	Composting Workshop	WRITE	1995	\$5,000.00	Maricopa		
Cayetano Consulting (Provisional Award)	Santa Cruz County Write	WRITE	1995	\$32,300.00	Pima		
City of Flagstaff	Expanded Environmental Education	WRITE	1995	\$16,304.00	Coconino		
City of Scottsdale	Comprehensive Information Packets	WRITE	1995	\$7,500.00	Maricopa		
Cocopai RCDA	Rural Recycling Workshop	WRITE	1995	\$4,000.00	Coconino		
Environmental Education Exchange	Mission 3r Interactive Computer Program	WRITE	1995	\$39,858.00	Pima		
Lone Pine LGFC	Cooperative Marketing Seminar	WRITE	1995	\$2,389.00	Navajo		
Mesa High School	Earthship	WRITE	1995	\$20,000.00	Maricopa		
Phoenix Clean and Beautiful	Small Business Recycling Workshops	WRITE	1995	\$5,118.00	Maricopa		

Table 13. Funded Pro	Ī	Turs a 1	Voca	Francisco er	Carrata
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Southwest Public Recycling Association	Buy Recycled Expo	WRITE	1995	\$15,000.00	Pima
Tucson Organic Gardeners	Compost Education Program	WRITE	1995	\$8,003.00	Pima
City of Glendale	Expansion of Hhw Program	HHW	1996	\$37,900.00	Maricopa
City of Holbrook	First Hhw Collection Day	HHW	1996	\$12,000.00	Navajo
City of Mesa	Multi- jurisdictional Hhw Collection	HHW	1996	\$100,000.00	Maricopa
City of Peoria	Mobile Hhw Collection Program	HHW	1996	\$82,600.00	Maricopa
City of Phoenix	Bopa Collections	HHW	1996	\$145,000.00	Maricopa
City of Tempe	Permanent Hhw Facility	HHW	1996	\$300,000.00	Maricopa
Mohave County	Multi- jurisdictional Hhw Collection	HHW	1996	\$80,000.00	Mohave
Pima County	Regional Hhw Collection Facility	HHW	1996	\$388,764.00	Pima
Pinal County	Permanent Collection Facility	HHW	1996	\$55,433.00	Pinal
Yuma County	Hhw Collection Events	HHW	1996	\$16,280.00	Yuma
Alliance Marketing Southwest	Program Expansion	WRA	1996	\$64,418.00	Maricopa
Boricel Corporation	Cellulose Insulation Batt - Kraft Laminator	WRA	1996	\$66,000.00	Maricopa
City of Flagstaff	The Salvage Source, Phase 1	WRA	1996	\$9,000.00	Coconino

Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
City of Mesa	Greenwaste Barrel Pilot	WRA	1996	\$75,000.00	Maricopa
City of Scottsdale	Library Book Binding Cutter And Recycling Project	WRA	1996	\$4,600.00	Maricopa
City of Yuma	City of Yuma Recycling Program	WRA	1996	\$22,750.00	Yuma
Desert Botanical Gardens	Compost Project and Demonstration	WRA	1996	\$18,659.00	Maricopa
Lone Pine LGFC	Drop-off Center and Compartmentalize d Containers	WRA	1996	\$16,225.00	Navajo
Northern Arizona University	Nau Residence Hall Recycling System	WRA	1996	\$31,084.00	Coconino
Phoenix Clean and Beautiful	Shares Program	WRA	1996	\$6,700.00	Maricopa
Pinal County	Mobile Recycling Project	WRA	1996	\$36,399.00	Pinal
Sun City Lions Club	Sun City Paper Mechanization	WRA	1996	\$5,000.00	Maricopa
Sun Lakes Homeowners Association	Recycling Expansion Project	WRA	1996	\$27,516.00	Maricopa
Town of Jerome	Jerome Compost Bins	WRA	1996	\$8,891.00	Yavapai
University of Arizona	Machine to Separate Bindings and Covers	WRA	1996	\$28,000.00	Pima
Arkay Enterprises	Winner's Circle Soils	SWRA	1997	\$60,000.00	Navajo

Table 13. Funded Projects							
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County		
City of Douglas	Recycling Upgrade and Expansion	SWRA	1997	\$32,120.00	Cochise		
City of Yuma Parks and Recreation	Backyard Composting Program	SWRA	1997	\$10,470.00	Yuma		
Cottonwood - Verde Valley Recycles	Compost and Recycling Program	SWRA	1997	\$10,000.00	Yavapai		
ECO One, Inc.	Recycling Association of Maricopa (Ram)	SWRA	1997	\$54,635.00	Pinal		
Norton Environmental, Inc.	Flagstaff Glass Pulverizing System	SWRA	1997	\$60,000.00	Coconino		
Palo Verde Disposal Service	Southern La Paz County Cooperative Recycling	SWRA	1997	\$48,855.00	La Paz		
Sierra Huachuca ARC, Inc.	Sharc Recycling	SWRA	1997	\$56,429.00	Cochise		
Agua-Fria - New River NRCD	The Earthworm Tunnel	WRITE	1998	\$14,143.00	Maricopa		
Arizona Clean and Beautiful	Influence Behavior Public Service Announcements	WRITE	1998	\$39,700.00	Maricopa		
Arizona Clean and Beautiful	Recycling Education in Rural Arizona	WRITE	1998	\$11,537.00	Maricopa		
Arizona Hotel/Motel Association	Education Campaign for the Hospitality Industry	WRITE	1998	\$19,300.00	Maricopa		
AzRC, Organic Products Committee	Annual Compost Workshop	WRITE	1998	\$7,000.00	Maricopa		

Table 13. Funded Projects							
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County		
City of Tucson, Solid Waste Department	Ravin' about Recycling!	WRITE	1998	\$51,385.00	Pima		
Cottonwood - Verde Valley Recycles	Education Outreach	WRITE	1998	\$25,000.00	Yavapai		
Gila County, Solid Waste Department	Gila County Recycle Grant	WRITE	1998	\$3,340.50	Gila		
Southwest Public Recycling Association	Technical Assistance to Rural Arizona Communities	WRITE	1998	\$28,018.00	Pima		
Town of Gilbert	Recycling Education Pilot Project	WRITE	1998	\$2,202.00	Maricopa		
Tucson Clean and Beautiful	Waste Reduction Education Display And Brochures	WRITE	1998	\$8,050.00	Pima		
VMB Enterprises	Grant Training Seminars	WRITE	1998	\$12,810.00	Maricopa		
Arizona State University	Development of Crumb Rubber Composites	WRA	1998	\$29,891.00	Maricopa		
City of Williams	Curbside Recycling	WRA	1998	\$57,135.00	Coconino		
EnviroSand, Inc.	Enviro Mill Machine	WRA	1998	\$75,000.00	Maricopa		
The Farm at South Mountain	Compost Demonstration Site	WRA	1998	\$15,000.00	Maricopa		
Friedman Recycling	Small Business Recycling	WRA	1998	\$39,000.00	Maricopa		
Gila Ridge Pallet Company	Pallet Waste Reduction	WRA	1998	\$52,200.00	Yuma		

Table 13. Funded Pro	ojects				
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Grower's Market	Maximum Diversion of Greenwaste	WRA	1998	\$58,000.00	Maricopa
Habitat for Humanity	Construction Closet	WRA	1998	\$50,000.00	Pima
Laidlaw Waste Systems	Boy Scout Newspaper Recycling	WRA	1998	\$8,010.00	Mohave
Maricopa Association of Governments	Recycling Information Exchange	WRA	1998	\$18,880.00	Maricopa
Pinal County	Expanded Mobile Recycling	WRA	1998	\$24,000.00	Pinal
Santa Cruz County	Abop Recycling Station	WRA	1998	\$32,500.00	Santa Cruz
Terra-Cycle Technologies	Vegetable Waste Composting	WRA	1998	\$65,000.00	Santa Cruz
Tucson Iron and Metal	Paper and Plastic Recycling	WRA	1998	\$75,000.00	Pima
City of Flagstaff	Curbside Recycling	WRITE	1999	\$32,922.00	Coconino
City of Phoenix	Toxic Avenger	WRITE	1999	\$5,500.00	Maricopa
Cochise County	Coordinated Recycling Education	WRITE	1999	\$60,000.00	Cochise
ECO One, Inc.	Ram Education Project	WRITE	1999	\$19,989.00	Pinal
EM Technologies	Em Bukashi Composting	WRITE	1999	\$57,292.00	Pima
Southwest Public Recycling Association	Hhw Brochure	WRITE	1999	\$14,000.00	Pima
Southwest Public Recycling Association	Technical Assistance	WRITE	1999	\$31,150.00	Pima

Table 13. Funded Projects							
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County		
Starr Communications	Radio Public Service Advertisements Campaign	WRITE	1999	\$24,180.00	Yavapai		
Tuba City	Protective Circle	WRITE	1999	\$13,690.00	Coconino		
City of Bisbee	Wood Chipping Program	WRA	1999	\$12,468.00	Cochise		
Colorado River Indian Tribes	Purchase of a Mulching Machine	WRA	1999	\$20,900.00	La Paz		
ELF Products, LLC	Shipping Pallets Using Recycled Plastics	WRA	1999	\$75,000.00	Pima		
Gila County, Solid Waste Department	Purchase a Wood Chipper	WRA	1999	\$33,703.00	Gila		
LB International, Inc.	Bio-mass Fuel Source - "Eco-log"	WRA	1999	\$75,000.00	Coconino		
Southwest Public Recycling Association	Commercial Glass Recycling Infrastructure	WRA	1999	\$33,300.00	Maricopa		
Tucson Roll-Offs and Recycling	Construction and Demolition Debris Sorting Line	WRA	1999	\$73,400.00	Pima		
Universal Entech, LLC	Construction and Demolition Debris Screening System	WRA	1999	\$75,000.00	Maricopa		
Verde Valley Fire Chief's Association	Verde Valley Hhw Demonstration Program	WRA	1999	\$25,000.00	Yavapai		
Waste Not Recycling Centers	Nylon 6 and Nylon 6.6 Carpet Recycling	WRA	1999	\$48,750.00	Maricopa		

Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Western Organics, Inc.	Screening for the Future	WRA	1999	\$75,000.00	Maricopa
Arizona State University	Paint Materials That Contain Crumb Rubber	R and D	1999	\$6,300.00	Maricopa
Hortec, Inc.	Reuse of Dairy Wastewater in Composting	R and D	1999	\$50,000.00	Maricopa
Northern Arizona University	Composting of Food Service Waste	R and D	1999	\$6,300.00	Coconino
Sonora Environmental Research Institute	Recycled Mixed Cullet as An Alternative Abrasive	R and D	1999	\$45,062.00	Pima
Sonora Environmental Research Institute	Develop a Low Cost Sorter Of Recyclable Material	R and D	1999	\$43,730.00	Pima
Southwest Public Recycling Association	Waste Characterization Studies For Rural Communities	R and D	1999	\$35,238.00	Pima
Arizona Recycling Coalition	Arizona Recycling Conference	WRITE	2000	\$34,700.00	Maricopa
Cochise County	Community Education Program On Waste Reduction	WRITE	2000	\$22,080.00	Cochise
Next Wave Productions, LLC	Hip-hop Public Service Announcements	WRITE	2000	\$60,000.00	Maricopa

Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Phoenix Clean and Beautiful	Solid Waste Collection Vehicle Signs	WRITE	2000	\$14,500.00	Maricopa
Southwest Public Recycling Association	Arizona Recycling Coordinator's Manual and Workshop	WRITE	2000	\$25,520.00	Pima
Stardust Building Supplies	Public Awareness and Promotion Program	WRITE	2000	\$41,900.00	Maricopa
Town of Eagar	Community Education Program	WRITE	2000	\$41,521.00	Apache
Town of Payson	Town of Payson Recycling Education And Awareness	WRITE	2000	\$13,160.00	Gila
American Surface Technologies, Inc.	Safety Surfacing Materials from Truck And Otr Tires	WRA	2000	\$75,000.00	Maricopa
Arizona Biocomposites, LLC	Bondomass Pellet Machine	WRA	2000	\$100,000.00	Maricopa
City of Holbrook	Holbrook Drop-off Recycling Centers	WRA	2000	\$10,240.00	Navajo
City of Mesa	Clean Sweep Program	WRA	2000	\$32,000.00	Maricopa
City of Tombstone	Wood Chipper for Mulch and Composting	WRA	2000	\$17,855.00	Cochise
City of Willcox	Greenwaste Reduction Program	WRA	2000	\$55,000.00	Cochise
City of Yuma, Public Works Department	Household Hazardous Waste Facility	WRA	2000	\$20,040.00	Yuma

Table 13. Funded Projects							
Organization	Project Title	Type <sup>1</sup>	Year	Funding	County		
Grower's Mulch	Maximum Sales of Compost	WRA	2000	\$100,000.00	Maricopa		
Mattera Enterprises Recycling Company	Material Handling Equipment And Recycling Containers	WRA	2000	\$100,000.00	Yavapai		
Northern Arizona University	Nau Composting Project	WRA	2000	\$84,450.00	Coconino		
Pinal County, Department of Public Works	Project Waste Diversion in Rural Pinal County	WRA	2000	\$35,000.00	Pinal		
Southwest Public Recycling Association	Joint Purchase of Recycling Equipment	WRA	2000	\$53,005.00	Pima		
Tucson Roll-Offs and Recycling	Alternative Building Materials	WRA	2000	\$100,000.00	Pima		
Volunteer Associates, Inc.	Teenbuild Recycling Center	WRA	2000	\$10,714.00	Coconino		
Waste Not Recycling Center	East Valley Receiving Center For Carpet Recycling	WRA	2000	\$48,364.50	Maricopa		
Greenlee County	Greenlee County Waste Stream Study	R and D	2000	\$31,915.00	Greenlee		
Universal Entech, LLC	Innovative Waste Paper Recovery Technology	R and D	2000	\$50,000.00	Maricopa		
City of Glendale	Recycle Fest 2001	WRITE	2001	\$11,250.00	Maricopa		
City of Phoenix	Multi- jurisdictional Recycling Educational Campaign	WRITE	2001	\$60,000.00	Maricopa		

Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
City of Winslow	Waste Reduction: Education and Practical Applications	WRITE	2001	\$6,160.00	Navajo
Environmental Educational Exchange	Reduce-reuse- recycle: Mission 3r On-line	WRITE	2001	\$20,000.00	Pima
Northern Arizona University	Protective Circle ii	WRITE	2001	\$54,856.00	Coconino
Sedona Recycles, Inc.	Verde Valley Recycling Media Campaign	WRITE	2001	\$28,840.00	Yavapai/ Coconino
City of Douglas	Horizontal Baler	WRA	2001	\$39,900.00	Cochise
City of Phoenix, Solid Waste Field Services Department	Appliances/electro nics Collection and Recycling Program	WRA	2001	\$100,000.00	Maricopa
City of San Luis, Department of Public Works	Purchase of Chipper for City of San Luis	WRA	2001	\$24,000.00	Yuma
City of Winslow	Winslow Recycles Saving for Our Future	WRA	2001	\$11,800.00	Navajo
ECO One, Inc.	Glass Processing Expansion Project	WRA	2001	\$23,392.00	Pinal
Norton Environmental, Inc.	New Recycling Truck to Service Coconino County	WRA	2001	\$99,840.00	Coconino
Palo Verde Valley Disposal Services	Southern La Paz County Cooperative Recycling Program	WRA	2001	\$99,960.00	La Paz
San Pedro NRCD	Benson Community Yard Waste to Compost	WRA	2001	\$35,200.00	Cochise

Organization	Project Title	Type <sup>1</sup>	Year	Funding	County
Sierra Huachuca ARC, Inc.	SHARC Fiber Recycling Project	WRA	2001	\$60,000.00	Cochise
Town of Gila Bend	Greenwaste Utilization Program	WRA	2001	\$56,300.00	Maricopa
Town of Payson	Household Hazardous Products Collection Event	WRA	2001	\$17,005.00	Gila
Valley Recycling Works, Inc.	Waste Reduction Assistance Proposal	WRA	2001	\$47,708.00	Maricopa
Western Organics, Inc.	Bagging for the Future	WRA	2001	\$100,000.00	Maricopa
City of Goodyear, Public Works Department	Regional Recycling Master Plan for the Southwest Valley	R and D	2001	\$50,000.00	Maricopa
Sonora Environmental Research Institute	Use of Cullet as a Tennis Court Surface	R and D	2001	\$48,660.00	Pima
Alliance Book Company	Commercializing an Automatic Book Cutting Machine	R and D	2001	\$43,350.00	Maricopa
Town of Eagar	Recycling Feasibility and Gaps Analysis	R and D	2001	\$18,420.00	Apache
				\$8,272,815.16	

# Glossary

The following glossary terms have been defined for the purpose of the recycling program annual report. The program obtained the definitions from the sources listed at the end of the glossary.

#### - B -

**Backyard composting** – On-site controlled decomposition of organic matter by micro-organisms (mainly bacteria and fungi) into a humus-like product. Backyard composting is excluded from recycling activities. It is considered source reduction because the composted material never enters the municipal solid waste stream.

**Baler** – Equipment that compacts and binds recyclable materials to reduce volume and transportation costs.

**Blue bag** – blue bag recycling programs are a form of curbside collection of recyclables. The recyclables are placed within a blue colored bag for collection.

#### - C -

**Closing the loop** – The complete cycle of collecting, processing, manufacturing and purchasing products with recycled contents; with an emphasis on purchasing.

**Commingled** – A mixture of any number of recyclable materials that must be separated before they can be recycled.

**Compost** – A substance occurring from the natural breakdown of plant and animal material by microbial decay. It is rich in humus that is beneficial to plants.

**Composting** – A controlled waste management alternative in which organic wastes are partially decomposed by aerobic bacteria and fungi, producing a useful soil enhancer.

**Construction and demolition debris (C & D)** – Waste generated by the construction and demolition industry, including new construction, remodeling and demolition of homes, businesses and other buildings.

**Corrugated cardboard** – Three layers of paperboard made for packaging purposes to protect products. The outer layers are smooth with an inner layer that has wrinkles or folds.

**Corrosives** – Chemicals that cause visible destruction of or irreversible alterations in living tissue by chemical action at the site of contact.

**Cullet** – Small pieces of broken or refuse glass or plastic, usually added to new

material to facilitate melting when making new products.

**Curbside recycling** – Any residential recycling program that collects a variety of materials left in close proximity to their sources on a regularly scheduled basis. The program requires the collection of one recyclable material other than greenwaste or white goods. Material can be collected at the curb or in the alley for single family residences. Multi-family complexes are included if on-site recycling containers are provided. The recyclable materials may be source separated, sorted at the curb, blue bagged or the complete residential waste stream sorted at a dirty materials recovery facility (MRF).

#### - D -

**Dirty MRF** – A facility that receives waste just as if it were going to a landfill. The mixed waste is loaded on conveyors and, using both mechanical and manual (high and low technology) sorting, recyclable materials are removed for further processing.

**Diversion rate** – The percentage of all waste, municipal and non-municipal, that is diverted from landfills. It also includes any municipal solid waste diverted from landfill, but is not recycled. This includes items that are reused and materials that are burned for energy.

**Drop-off centers** – Locations, often with unattended bins, where consumers can leave recyclable materials.

#### - F -

**Fiscal year (FY)** – A designated reporting period. ADEQ's is July 1through June 30 of each year.

**Flammable(s)** – Easily ignited or capable of burning with great rapidity.

#### - G -

**Generation rate** – The average amount of municipal solid waste generated by each person in a designated population per day. It is determined by dividing the sum of the amount of municipal solid waste landfilled and recycled by the product of the population and the number of days in a year.

#### - H -

**HDPE plastic (code #2)** – High density polyethylene; a plastic used to make packaging such as milk jugs, purified water containers, detergent bottles.

**Household hazardous waste (HHW)** – Products used in the home that contain substances that are listed or that exhibit the characteristics of hazardous wastes as defined by the Resource Conservation and Recovery Act (RCRA): toxic,

corrosive, ignitable or reactive. RCRA does not require that household hazardous wastes be disposed of as hazardous wastes, but caution should be taken to dispose of them to minimize the impact to human health and the environment.

#### - I -

**Illegal dumping (wildcat dumping)** – Disposing of waste in an improper manner and/or location and in violation of waste disposal laws.

#### - L -

**Landfill** – A large, outdoor area for burying solid waste; in sanitary landfills, waste is layered and covered with soil.

#### - M -

**Materials recovery facility (MRF)** – A facility that separates collected, commingled recyclables by material type. This process prepares materials for remanufacturing.

**Mixed paper** – A "catch all" category for unsorted paper recovered from offices, homes and other establishments and includes light colored papers, envelopes, magazines, catalogs, manilla folders, newspapers, phone books, etc.

**Monomer** – A molecule that can be chemically bound as a unit of a polymer.

**Mulch** – A protective covering of various substances (especially chipped non-decomposed organic material) placed on the earth around plants to retard weed growth and prevent moisture evaporation and freezing of roots.

**Municipal solid waste (MSW)** – Wastes such as durable goods, non-durable goods, containers and packaging, food scraps, yard trimmings, and miscellaneous inorganic wastes from residential, commercial, institutional and industrial solid waste sources. Examples of wastes from these categories include: appliances, newspaper, clothing, boxes, disposable tableware, office and classroom paper, wood pallets and cafeteria waste.

#### - N -

**Natural resource** – The supply of non-manufactured materials used to making goods.

**Newsprint** – Uncoated paper, whether supercalendered or machine finished, including the type generally used for the publication of newspapers, commercial advertising inserts, directories or commercial advertising mailers, that is made primarily from mechanical wood pulps combined with some chemical wood pulp. Newsprint includes paper made from old newspapers that have been de-inked, using the recycled pulp in lieu of virgin pulp. Newsprint includes all grades of

paper sold as newsprint, supercalendered (SC) uncoated groundwood, or machine finished (MF) uncoated groundwood.

**Non-municipal solid waste (non-MSW)** – Heavy industrial and commercial wastes. Examples of non-municipal solid waste include construction and demolition debris, automobile bodies, municipal sludge, combustion ash and industrial process wastes that might be disposed of in municipal solid waste landfills.

**Nonrenewable resource** – A natural resource that is not capable of being naturally restored or replenished; resources available in a fixed amount (stock) in the earth's crust; they can be exhausted either because they are not replaced by natural processes such as copper or because they are replaced more slowly then they are used for example oil and coal.

- O -

**OCC** – Old corrugated containers.

**Office paper** – White, mixed color, computer, etc. paper that is part of the commercial recyclables collection infrastructure.

**ONP** – Old newsprint.

**Organic** – Derived from living organisms; organic wastes include food, leaves, grass clippings, etc.

**Overruns** – Quantity of newspapers or other printed material that is larger than that ordered or needed and is left unsold. The material is often collected from retail outlets by the distributer and either recycled or landfilled.

- P -

**Packaging** – The materials used to wrap, contain and protect food, household and industrial products; materials used to make packaging are from paper, cardboard, metals, ceramics, glass, wood, plastics or paperboard.

**Paper** – Newspaper, high grade office paper, fine paper, bond paper, offset paper, xerographic paper, duplicator paper and related types of cellulosic material containing not more than ten percent by weight or volume of noncellulosic material such as laminates, binders, coatings or saturants.

**Plastics** – A specific polymer or mix of polymers in combination with various amounts of plasticizers, stabilizers, colorants, fillers and other organic and inorganic compounds.

**Post-consumer material** – A discard generated by a business or residence that has fulfilled its originally intended use. Post-consumer materialincludes discards from industrial or manufacturing processes.

**Pre-consumer material** – Waste generated during the manufacturing process, including industrial scraps, trimmings and overruns.

**Precycling** – A source reduction option where by evaluation and selection of items for purchase is dependent upon method of manufacture, product content and recyclability of the product after consumer use.

**Process or processing** – The reduction, separation, recovery, conversion or recycling of solid waste.

**Pulp substitute** – A material, often generated in the converting operation, that can replace wood pulp materials in paper and paperboard production. This grade of paper is almost exclusively a pre-consumer material.

#### - R -

**Recyclable material** – Post-consumer materials that may be collected, separated, cleansed, treated or reconstituted and returned to the economic stream in the form of raw materials or products.

**Recycle (recycling)** – To reprocess materials, that may otherwise be thrown away, for use in the manufacture of new products. Collecting, sorting and transporting of the waste materials are important steps in recycling. Materials such as aluminum, steel, paper, glass and plastic can be recycled.

**Recycled** – A process by which post-consumer materials are collected, separated, cleansed, treated or reconstituted and returned to the economic stream in the form of raw materials or products.

**Recycled materials** – Those materials that have been separated from the solid waste stream, processed and returned to the economic stream in the form of raw materials or products.

**Recycling bin** – A container in which to put recyclable materials.

**Recycling center** – A place where recyclable items are taken for processing.

**Recycling loop** – A process in which used materials are separated from other solid waste and made into new products. The loop is completed when the recycled products are used.

**Recycling rate** – The percentage of municipal solid waste (MSW) that has been recycled. It differs from the diversion rate because only municipal solid waste is used in determining its value. Also, municipal solid waste that is diverted, but not truly recycled, such as items that are reused and material that is burned for energy, is not counted as recycled; this material is included as part of the municipal solid waste stream.

**Reduce** – To use less of a product, package or an energy source.

**Reusable** – Capable of being used again, either as is or by repairing it.

**Reuse** – The return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.

**Roll-off container** – A metal container, twenty cubic yards or greater in volume, that is picked up by a large semi-truck, transported to a processing site, "rolled-off" its transport and emptied. These containers are usually used in the collection of large or bulky items such as yard trimmings, C & D debris and land clearing material.

#### - S -

**Solid waste** – Any garbage, trash, rubbish, waste tire, refuse, sludge from a waste treatment plant, water supply treatment plant or pollution control facility and other discarded material, including solid, liquid, semisolid or contained gaseous material.

**Solid waste management** – The systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid waste in a manner that protects public health, safety and the environment, and prevents and abates environmental nuisances.

**Source reduction** – Any action that causes a net reduction in the generation of solid waste and includes reducing the use of non-recyclable materials, replacing disposable materials and products, reducing packaging, reducing the amount of yard waste generated, establishing garbage rate structure with incentives to reduce the amount of wastes that generators produce, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic and other materials in the manufacturing process.

**Source separation** – The segregation of various materials from the waste stream at the point of generation for recycling (e. g. , householders separating paper, metal and glass from the rest of their waste).

#### - T -

**Transfer station**– A site that is owned, operated, or used by any person for the rehandling or storage for 90 days or less of solid waste that was generated off-site for the primary purpose of transporting that solid waste.

#### - U -

**UBCs** – Used beverage containers made from aluminum.

**Used oil** – Any oil that has been refined from crude or synthetic oil, and as a result of use, storage or handling has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, but that may be suitable for further use and may be economically recyclable.

# - **V** -

**Vegetable waste** – Waste generated through discards of produce during the processing, distribution, retail and meal preparation.

**Virgin material** – Occurring in its natural or raw form. Virgin materials are derived from natural resources and do not include recyclables.

#### - W -

**Waste generator** – A person, business, government agency or other organization that produces solid waste.

**Waste stream** – The solid waste material output of a community, region or facility.

**Waste-to-energy** – A recovery process where waste is burned as received or after being processed to a more uniform fuel, to generate steam or electricity.

#### - Y -

**Yard waste (yard trimmings)** – Vegetative matter resulting from landscaping maintenance including tree and shrub trimmings, grass clippings, palm fronds and trees.

#### References

Arizona Revised Statutes, 1997 Edition, Article 8, 49-831 and Article 1, 49-701. "Characterization of Municipal Solid Waste in the United States: 1997 Update, "U. S. Environmental Protection Agency, EPA 530-R-98-007, May 1998. "Waste in Place," Keep America Beautiful, 6<sup>th</sup> Edition, 1997.

Mission 3R's, "A Challenge for Change," Teacher's Guide. The Environmental Education Exchange and the ADEQ recycling program, Version 1. October 1996.

Webster's II, New Riverside University Dictionary, 1984.

### **Web Printers**

This table contains the web printer companies contacted during the FY 2001 recycled content verification process. Contact information is given along with the company name. The second column gives the total amount of paper consumed by the printer, followed by the amount of the paper that was produced from recycled feedstock and the resulting percentage of recycled-content newsprint for FY 2001. The final column lists the sources from which the printer procured its newsprint.

Table 14. Web Printers				
Web Printer	Recycled content 2001 (Metric Tons)		Paper Suppliers	
Arizona Republic Attn: William D. Cordt 200 East Van Buren Street Phoenix, AZ 85004 (602) 444-8131	Total Paper: Recycled Paper: Percentage:	117,892 76,085 <b>64.54%</b>	Abitibi Consolidated – Snowflake Abitibi, Consolidated–Sheldon Norpac Norske Skog/Fletcher Oji Paper Canada Ponderay Newsprint Company SP Newsprint Stadacona/Daishowa	
Arizona Web Printing Attn: Annebelle L. Seymour 637 S. Vine Ave. Tucson, AZ 85719 (520) 903-9340	Total Paper:  Recycled Paper:  Percentage:	657 167 <b>25.34</b> %	Abitibi Consolidated E. Aaroan Enterprise McGrann Paper	
Casa Grande Valley Newspapers Attn: Dan McKinley PO Box 15002 Casa Grande, AZ 85230 (520) 836-7461	Total Paper: Recycled Paper: Percentage:	663 253 <b>38.20</b> %	Abitibi Consolidated Alabama River	
Central Print Facility Attn: Bruce Pedersen 7080 Hwy 68 Golden Valley, AZ86413 (520) 565-9888	Total Paper: Recycled Paper: Percentage:	1,921 1,674 <b>87.16</b> %	Abitibi Consolidated McGrann Paper Smurfit-Blue Heron Gould Unisource	
Century Graphics Attn: Barbara Knight 2960 Northwest Grand Ave. Phoenix, AZ85017-4909 (602) 271-4060	Total Paper: Recycled Paper: Percentage:	157 86 <b>55.03</b> %	Abitibi Consolidated McGrann Paper	

Web Printer	Recycled content 2001 (Metric Tons)		Paper Suppliers
Daily Dispatch	Total Paper:	100	Abitibi Consolidated
Attn: Lawrence Blaskey PO Box H Douglas, AZ85608	Recycled Paper:	100	
(520) 304-3424	Percentage:	100.00%	
<b>Daily News Sun</b> Attn: James B. Dickey	Total Paper:	2,755	Abitibi Consolidated
10102 Santa Fe Drive Sun City, AZ85351	Recycled Paper:	1,620	
(623) 977-8351	Percentage:	58.80%	
<b>Fidelity Press West</b> Attn: Ray Schlagel	Total Paper:	79	Abitibi Consolidated (2000) None identified (2001)
3549 East Broadway Road Phoenix, AZ85040	Recycled Paper:	79	
(602) 276-5123	Percentage:	100.00%	
Flagstaff Publishing PO Box 1849	Total Paper:	1,177	Inland Empire
Flagstaff, AZ 86002 (520) 556-2294	Recycled Paper:	1,127	
	Percentage:	95.71%	
Freedom Newspapers of Southwestern Arizona	Total Paper:	1,200	Abitibi Consolidated Web Source
Attn: David W. Fornof 2055 Arizona Ave.	Recycled Paper:	1,140	
Yuma, AZ 85364 (928) 539-6988	Percentage:	95.00%	
Intermountain Color – Phoenix	Total Paper:	1,861	Abitibi Consolidated Inland Empire Pine Falls Paper
Attn: Dave Sorensen PO Box 4299	Recycled Paper:	1,706	
Boulder, CO 80306 (303) 443-3800	Percentage:	91.70%	
Intermountain Color – Tucson Attn: Dave Sorensen	Total Paper:	1,384	Abitibi Consolidated Donahue
PO Box 4299 Boulder, CO 80306	Recycled Paper:	1,264	Inland Empire Pine Falls Paper
(303) 443-3800	Percentage:	91.32%	•

Web Printer	Recycled content 2001 (Metric Tons)		Paper Suppliers
<b>Liberty Globe Publishing</b> Attn: Ellen A. Kretsch	Total Paper:	82.30	Atlas Papers
PO Box 31 Globe, AZ 85502	Recycled Paper:	82.30	
(928) 425-7121	Percentage:	100.00%	
<b>Navajo Times</b> Attn: William Holtsoi	Total Paper:	174	Abitibi Consolidated
PO Box 310 Window Rock, AZ 86515	Recycled Paper:	174	
(800) 871-6408	Percentage:	100.00%	
News West Publishing Company	Total Paper:	1,205	Abitibi Consolidated Atlas Papers – Blue Heron
Attn: Nancy E. Darmofal	Recycled Paper:	1,050	Atlas Papers – Smurfit
2435 Miracle Mile Bullhead City, AZ 86442 (520) 763-2505	Percentage:	87.16%	Norpac Unisource
<b>Phoenix Offset</b> Attn: Ed Hildebrand	Total Paper:	11,334	Abitibi Consolidated Gould
411 N. Roosevelt Ave. Chandler, AZ 85226	Recycled Paper:	9,368	Norpac
(480) 961-6100	Percentage:	95.00%	
<b>Pine Graphics</b> Attn: Joanne McKeman	Total Paper:	2	Kelly Paper Xpedx
PO Box 88 Overgaard, AZ 85933	Recycled Paper:	0	
(928) 535-4242	Percentage:	0.00%	
Prescott Newspapers, Incorporated	Total Paper:	3,673	Abitibi Consolidated Associated Buyers
Attn: Patrick G. Sullivan	Recycled Paper:	3,091	Atlas Papers, Inc.
3249 E. Hwy 69 Prescott Valley, AZ 86314 (520) 775-3804	Percentage:	84.16%	Gould Unisource
<b>Pueblo Publishers</b> Attn: Roger W. Toops	Total Paper:	257	Abitibi Consolidated General Newsprint
7122 N. 59 <sup>th</sup> Ave. Glendale, AZ 85301	Recycled Paper:	214	
(623) 842-6000	Percentage:	83.19%	

Web Printer	Recycled conte		Paper Suppliers  Abitibi Consolidated
Quebecore World	Total Paper:	5,895	
Attn: Janet Dines 850 E. Watkins St., Suite 20	Recycled Paper:	5,298	Horizon Paper Company McGrann Paper
Phoenix, AZ 85034 (602) 229-1212	Percentage:	89.87%	
Sedona Red Rock News Attn: Robert B. Larson	Total Paper:	274	Abitibi Consolidated Atlas Papers
PO Box 619 Sedona, AZ86339	Recycled Paper:	209	Auas I apeis
(520) 282-6809	Percentage:	76.59%	
<b>Sierra Vista Herald</b> Attn: Philip L. Vega	Total Paper:	1,122	Abitibi Consolidated Champion International
102 Fab Avenue Sierra Vista, AZ85635	Recycled Paper:	523	Champion International
(520) 458-9440	Percentage:	46.61%	
Territorial Newspapers Attn: Scott B. Linstrom	Total Paper:	707	Abitibi Consolidated
PO Box 27087 Fucson, AZ85726	Recycled Paper:	57	
(520) 294-1200	Percentage:	8.06%	
Tribune	Total Paper:	19,253	Abitibi Consolidated Deridder Mill
Attn: Douge Trappe 120 East 1 <sup>st</sup> Street Mesa, AZ85210	Recycled Paper:	10,388	Fort Frances Web Source
(480) 898-6594	Percentage:	53.95%	web bource
<b>Tucson Newspapers</b> Attn: Sandra Osborne	Total Paper:	26,143	Abitibi Consolidated NORPAC
PO Box 26877 Γucson, AZ 85726-6887	Recycled Paper:	18,155	Pacitica Papers
(520) 573-4454	Percentage:	69.45%	
V <b>alley Newspapers</b> Attn: Steve Steinke, Mike	Total Paper:	2,502	Abitibi Consolidated Abitibi Mando
acobs 23043 North 16 <sup>th</sup> Lane	Recycled Paper:	1,770	Bowater Gould
Phoenix, AZ85029 623) 445-2800	Percentage:	52.23%	Norpac

Table 14. Web Printers				
Web Printer	Recycled conte (Metric To		Paper Suppliers	
<b>Worldwest LLC</b> Attn: Richard Haddad	Total Paper:	206	Abitibi Consolidated	
PO Box 2520 Payson, AZ 85541	Recycled Paper:	206		
(520) 474-5251	Percentage:	100.00%		